



MARINA

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IMAREST

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Shipping & Maritime News

2008 Shenzhen International Maritime Forum (17 – 18 April 2008)

The 2008 International Maritime Forum held between 17 and 18 April in Shenzhen was organized and sponsored by the PRC Maritime Safety Administration and the Shenzhen Maritime Safety Administration. The Forum was well attended by over 300 delegates from local and overseas administrations and organizations. Speakers at the Forum included Messrs Ashok Mahapatra and Peter Brady of IMO, Ms. Doumbia-Henry of ILO and Mr. Roger Tupper, Director of Marine of HKSAR. The theme of the Forum was “Seafarers and Development”.

The Forum highlighted that most international organizations and government administrations made all effort to promote safety of life and property at sea and the protection of the marine environment. They also understood that all this effort should fall upon the responsibility of the seafarers. However, there are many factors affecting the sustainable development of seafarers. Mr. Roger Tupper attempted to offer his views on the solution to the shortage of seafarers. The following is an abstract of Mr. Tupper’s speech at the Forum.

Mr. Tupper said, “It is important not only for the future growth of the maritime sector in the long term but as an international business whose function is crucial to the efficient movement of world trade. A shortage of seafarers may lead to lowering of operating standards in the short term, with consequences to marine safety and environment protection”.

Up until the 1980s most ships involved in international trade were owned by OECD countries such as the US, Japan, Greece, Norway, the UK, and up to that time almost all officers on these ships were recruited from those countries and employed on long term contracts. In the 1980s and beyond a trend, long favoured by US owners in international trades, to “flag out” ships to Liberia and Panama and recruit officers from the international pool as when required became prevalent in the industry. Recruitment and training in OECD countries was neglected or ceased altogether as junior officers were sought from the Philippines and India, and those officers who remained did so under short term offshore contracts and reduced conditions of employment. Ship management companies expanded their business during this time with a great emphasis in officers of all ranks from India.

Another scenario with the coastal trade in Europe was that due to the constraint in employing seafarers from

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SHIP REPAIRS

Asia, many owners had resorted to reducing manning level to cope with the short supply situation of OECD officers. Needless to say the resulting increase in hardship working on these coastal ships was not conducive in attracting young persons to take up a sea career.

Global trade in commodities and manufactured goods has boomed in the last ten years with much of this growth fuelled by movements of raw materials to Asia from source countries around the world and finish goods to the consumer economies of US, Europe and the Middle East. Ships used for these trades are bigger and more technically sophisticated than any going before, requiring better educated marine officers to be trained to reach the necessary skills to operate these 100 million dollar plus investment. A rapid increase in demand for highly skilled officers being met by a big decline in experienced seafarers demonstrates that there is a lack of efforts to train new officers by established maritime countries and shipping lines. The main reason why industry in general has failed to meet its needs for experienced seafarers is because the industry didn't try to recruit them for long term careers in its companies.

Mr. Tupper considered that once shipping companies across the board formulate a consistent plan of recruitment, career development and training, with opportunities for experience enhancement right up to command and shore management, the number of right minded and eager recruits will swell. It is therefore important that shipping companies should create career development programmes that extend beyond cadetships. Governments have a fundamental responsibility to safeguard the working environment of seafarers on board their own flag ships and for those ships visiting their ports. Similarly, seafarer

representative organizations not only have a role in wages but more so in conditions.

Mr. Tupper concluded that shipowners, ship managers, government and indeed marine labour groups all have a role to play in improving the recruitment of a new generation of seafarers. It would be only with concerted effort from all parties concerned that we can nurture the next generation of seafarers with the right caliber to handle the modern sophisticated ships, and in the long run, to take over the role in leading the maritime industry into the new era.

(S Y Tsui)

Technology towards 2015 – DNV Research and Innovation's assessment of development trends

World Shipping

- Modularized design and ship production technology will improve and reduce ship building lead-time.
- Ship design and optimization, increased focus will be on fuel saving and emission reduction technologies.



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- New ship types will be introduced, e.g. wide catamarans without the need for ballast water.
- Multi-functionality of ships will supersede specialization, facilitating higher income yields and improving lifecycle capability of the designs.
- Vessel configuration and arrangements for quick turnaround time in port, and flexibility with regard to cargo handling capability, will be improved.
- Lightweight materials will find increasing applications for reducing weight.
- New materials for ship building, e.g. sandwich design, composites, surface treatments.
- New power systems, e.g. demonstration of fuel cells and wind power for ships.
- Risk management related to safety, environment, security, economy, and reputation in ship operation and design.
- Training of crew, e.g. advanced simulators will be used to familiarize the crew with new equipment, and different situations.
- e-Navigation: i.e. integration and standardization of technological infrastructure onboard and ashore.

Operation

- Advanced scheduling, planning software, and use of real-time data to handle the increased complexity of daily operations, i.e. effective fleet management.
- Better procedures and logistic tools for increased efficiency in the distribution of cargo in and out of the port areas.
- New bulk transport such as biofuels or CO₂ may require new terminal and loading technologies as well as altered handling procedures.
- Information management with respect both to port security requirements (i.e. documentation, identification), and to ship operation requirements (i.e. container tracing, information flow in work

processes). Extending shipping service portfolios towards onshore cargo handling will require increased information handling.

- e-Navigation: e.g. standardized and efficient navigational information exchange and sophisticated navigational software will become central.
- Arctic conditions will require solutions for safe and efficient ship operations, e.g. transport of oil and gas, crew training, emergency handling.

Safety and Security

- Equipment for navigational safety: e.g. ECDIS, track control systems, radar and sonar technologies.
- Technologies for ship traffic monitoring: e.g. AIS, satellite surveillance system, and LRIT.
- Consequence modeling software for real-time decision support, related to e.g. damage evaluation, passenger evacuation, and clean-up strategies.
- Intelligent alarms in case of e.g. fire and smoke, water ingress, and critical courses.
- Condition monitoring technologies to prevent fatigue-induced accidents, e.g. ice loading monitoring (onboard and ashore).
- Passenger monitoring systems for crisis and evacuation management.
- Voyage Data Recorders (VDR) utilized in accident investigations to retrieve causal information.
- Methodologies for risk-based approval of ships will be in use.
- First principle tools to support risk-based ship design, e.g. simulation of fire and smoke, impact damage, intact and damage stability, and evacuation, integrated with design tools.
- New technologies for modeling and monitoring wind, waves, currents, and sea water levels with higher resolution.
- Information models to handle exchange of security-related information between ship and port.

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Environment

- Changes of fuel towards more environmentally-friendly types (e.g. LNG) will be reserved for ferries or small supply vessels that frequently enter the same port (i.e. filling station). Hydrogen will remain a niche fuel. LNG may see increasing blue-water use.
- Bunker fuels with low sulphur content will increasingly be offered by refineries.
- Exhaust gas cleaning technology will increasingly be applied, such as reliable selective catalytic reaction systems scrubbing.
- Alternative power generation, mainly auxiliary, based on fuel cells and photovoltaic panels will be implemented by some early movers. Tapping wind energy with kites or wind rotors will remain a niche activity.
- Energy saving and energy recycling, in small energy consumers and sources also, will be achieved by changing procedures and retrofitting e.g. variable speed drives and soft-starters to lower energy consumption, emissions, and wear. Wider adoption of heat recovery, and advanced power management.
- Drag reduction by new hull design.
- Air bubble injection around the ship's hull is a dark horse with large potential.
- Reliable anti-fouling paints based on non-adherence properties, for drag reduction and minimal transport of non-native organisms, will not be available in 2015, but will be under development.
- Efficient ballast water treatment systems that will consist of several sub-systems rather than a single

system, for targeted removal of specific groups of organisms.

- Reduction of noise pollution in ports and environmentally-vulnerable areas by either temporary switching to alternative propulsion systems, (e.g. electric), or by application of damping foundations for primary engines.
- Energy saving and emission reduction via better fleet utilization and use of weather routing.

Possible Challenges

The growing number of ships will lead to a shortage of qualified personnel to man the vessels. The current recruitment and training capacity of the industry is insufficient.

Regional port states introduce their own national regulations, which could negatively affect efficiency in shipping in the long run. Ships usually operate across many jurisdictions and large variations in regulations would introduce trading difficulties.

(Extracted from DNV's Technology Outlook 2015)

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HKIMT & HKJB News

Visit to Replica European Tall Ship, the "Bounty" – 10 May 2008

A group of 17, mainly members of HKIMT and HKJB and their families joined the event in the morning of 10 May. We were warmly received by Messrs. KY Kwong and CK Lo of the Hong Kong Resort Company Limited (HKR) at the Discovery Bay ferry terminal on Lantau Island and were transferred by a coach to the mooring of "Bounty", the new maritime icon of Hong Kong. On board the vessel, we were briefed of her history and particulars.



Families of members of HKIMT & HKJB



At the bow of Bounty

The three masted tall ship is a full scale model of the 18th Century original "H.M.A.V. Bounty" and was built in steel in New Zealand by Whangarei Engineering Construction in 1979 for the Dino de Laurentis film "The Bounty" released in 1983. Since then, she appeared in many film and television productions throughout the years. HKR acquired the vessel in 2007 with the objectives of promoting Hong Kong's tourist industry and serving the community through charitable activities.

The 387-tonne vessel has timber cladded topsides and decks and her hull measures 28.44 m L x 7.47m B x 3.81m D. Her overall length is 42 metres and her tallest mast is 33 meters in height above deck. She had sailed the world under her immense 900 sq.m. of sail power and a pair of Kelvin TASC8 diesels with a total output of 610KW propulsion power via twin screws. For ocean-going voyages, her crew would comprise a master, an engineer, a chef, 3 officers and 10 deckhands.

We had ample opportunities to explore the many below deck spaces and compartments of the 30-year old ship, to raise questions to the crew who were readily available to give comprehensive answers, to admire the



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Albert Lo, S F Ho together with our Golden MC, Miss Annie Wan



David at work in the engine room on Bounty

sophisticated rigging layouts and to pose ourselves as Captain William Bligh behind the nicely crafted steering wheel.

The visit ended with a coach tour of Discovery Bay. We not only gained an understanding of European tall ship layouts but also had a glimpse of the latest development in that part of Lantau Island. We would like to express our sincere gratitude to HKR and their staff for their warm hospitality.

(Reported by Jeremy S.F. Ho)

The Dragon Boat and Colour Boat Racing 2008

The 2008 Dragon Boat Racing hosted by the Hong Kong Marine Department in Government Dockyard, Stonecutter Island, was carried out successfully on 24th May.

Usually, raining was rather a common scene of the day, but this year we had a good lovely sunshine during the race. Although the one minute silence had been taken to mourn the victims of the Sichuan Earthquake. The whole event was fabulous and the spirit was very high.



Cheers, the HKJB team



Cheers with Mr. R. Tupper, the Director of Marine



The HKIMT team led by Mr. S K Ng



Don't rock the boat, HKJB team

This year, we were not only having the “old fellows”, but a group of young and energetic students from the HKTC (Tsing Yi) and MSTI also participated and formed one of the HKIMT colour boat teams. There were nineteen of them and the team was led by Dr. K.S. Fung and Mr. S.K. Ng. The HKIMT and HKJB teams took part in the HKIE-MMNC 30th Anniversary, Trophy Dragon Boat race event in which the joint team won the second position. The HKJB team won the third position in the colour boat race.

After the race, most of the HKIMT, HKJB and HKIE (MMNC) members stayed behind to join the mini lunch party hosted by HKIE-MMNC to celebrate its 30th Anniversary.

We enjoyed a lot in the races and the celebration. We look forward to having more members and participants to take part in MD's Dragon Boat and Colour Boat Race next year. We greatly appreciated for the Marine Department and HKIE-MMNC in organizing such a good racing event and the lunch party.

(Reported by Johnson Lee)

Article of Leisure

Remember When

A Poem About Technology

*A computer was something on TV
From a sci fi show of note.
A window was something you hated to clean
And ram was the cousin of goat.*

*Meg was the name of my girlfriend
And gig was a job for the nights.
Now they all mean different things
And that really mega bytes.*

*An application was for employment.
A program was a TV show.
A curser used profanity.
A keyboard was a piano.*

*Memory was something that you lost with age.
A CD was a bank account.
And if you had a 3 1/2" floppy
You hoped nobody found out.*

*Compress was something you did to the garbage
Not something you did to a file.
And if you unzipped anything in public
You'd be in jail for a while.*

*Log on was adding wood to the fire.
Hard drive was a long trip on the road.
A mouse pad was where a mouse lived.
And a backup happened to your commode.*

Cut you did with a pocket knife.

Paste you did with glue.

A web was a spider's home.

And a virus was the flu

I guess I'll stick to my pad and paper

And the memory in my head.

I hear nobody's been killed in a computer crash,

But when it happens they wish they were dead.

(From James S. Huggins' Refrigerator Door)

www.jamesshuggins.com

Coming Events in 2008

1. Technical Meeting "Ballast Water Management System" (tentatively in July 2008)
2. Technical Meeting "Conversion of Single Hull VLCCs to Double Hull VLCCs or VLOCs" (tentatively in Aug / Sept 2008)

3. Technical Meeting "revised MARPOL Annex VI (Air Pollution)" or "Ship Recycling" (tentatively in October 2008)
4. Interferry – 33rd Annual International Conference, 5 – 7 October 2008 at Sheraton Hong Kong Hotel
5. EAD AGM will be held in Hong Kong on 21 November 2008
6. HKJB & HKIMT Annual Ball 2008 at Shangri-La Hotel Kowloon, Hong Kong (confirmed on 21 November 2008)
7. INMEX Conference and Exhibition in Guangzhou cum Technical Visit to New Shipyard "Longxie" in Nam Sha of Guangdong (tentatively on 26 – 28 November 2008)

N.B.: Updated details and information of the above events will be placed in the website:

<http://www.hkimt.org.hk/technical.html>

[Please mark you diary if you are interested in the above and in attending, you could meet other members for information exchanges/networking]

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All correspondence should be addressed to the Hon Secretary, Hong Kong Joint Branch of RINA and IMarEST, G.P.O. Box 2516, Central, Hong Kong, or by facsimile to Fax no. (852) 2573 6966. All matters pertaining to MARINA should be addressed to the above contact address.

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